Somerville Climate Forward

Buildings Working Group Meeting #1

August 24, 2017

Attendees

- Craig Foley
- Stephen Moore, Commission on Energy Use and Climate Change
- Melissa Woods, City Staff
- Christine Andrews, City Staff
- Emily Chessin
- Ryan Pollin
- Mark Winterer
- Dana Clawson
- Rodney Dominique
- Liz Galloway
- Katrina Hall
- Oliver Sellers-Garcia, City Staff

Review and Revision of Vision

- Make sure carbon neutrality is part of the discussion
- Add "collectively" the sum total is really important. All buildings in Somerville together should be net-zero carbon, but it will be very difficult for every building to be net-zero individually.
- Outside of the vision statement sentence, we need to define "affordable."
- Need to clarify the definition of "equitable." (Stephen gave the example of a carbon tax—it could be very effective, but the costs might be highest for people with fewest resources).
- Consider use of the word "impact" instead of "burden," which is a little jargon.
- Make sure that we hold ourselves accountable on the equity component throughout the development of this plan.

Idea Brainstorm

- We can't expect a clean grid to solve all problems. Electrification with a clean grid is important, but we must also make changes in building energy consumption.
- Need behavioral changes as well as technology changes in buildings. Don't just rely on sensors for everything. Need people to understand how they consume energy data: do you need this appliance to be on?

- School programs that engage students and push parents to act. In the past, School Dept has been reluctant to do backpack stuffers.
- Think about renters and low income home-owners. Our solutions really need to be geared toward the people at the bottom of the economic latter. If it works for people at the bottom, it will also work for people at the top.
- White roofs on commercial buildings. This is a common strategy but there are some questions in this group: does this just end up trapping heat in the ambient air? Or does this raise heating costs in the winter?
- Need to get more buy-in from homeowners to take advantage of free programs that are already available.
 - o How do we increase more penetration of MassSave?
 - Look at a City of Boulder example
- Realtors should be more educated in explaining energy usage. That said, we need to recognize that
 realtors are going to be nervous about telling this because it can stigmatize a property. But maybe
 we need to think about stigmatizing the energy component of a property as leverage.
- Have more accessible information on energy usage in buying and renting, such as a scoring mechanism. Is this appearing on Zillow more?
- Look at National Realtor Association climate change policy (Craig). Energy score now available, coming from Tendril public record data. Unfortunately these energy scores are just modeled: we need better data.
- Need to prioritize getting better data energy data and information from utilities. For example the energy efficiency letters that come from Eversource just do not have enough information. You can take better action if there is more information. The comparisons with your "neighbors" should compare apples to apples, for instance homes with the same heating systems.
- There is a lot of redevelopment activity now. Is there a way that we can make standards for renovations that are going in now? Think about a Passivhaus standard because renovations are a once in a 30 year opportunity.
- If we can't set a specific standard, there are some elements of Passivhaus that are most effective.

 Air tightness is the main thing that makes the biggest difference between a high and low performing building.
- Look at Boston E+ program—offer developer no carrying costs until the property is sold, includes density bonus, includes affordable housing
- Generally, we need to look at incentives for green buildings
- Need to focus on commercial properties. Is there anything like the Storefront Improvement program that could be done for small commercial?
- Need more data on commercial properties. What are uses? What are big and small buildings/landlords?
- Mandate an energy audit with all cost effective measures implemented.
- Green leases for commercial properties. Both the owner and the tenant benefits.
- Stormwater utility fee based on pervious surface. This actually has an equity component: a mall or big box store with a big parking lot is subsidized by small property owners.

- Need more water-efficient fixtures. Utility programs do not address this well. For example, toilet retrofits are very cheap and low-skill required.
- Resiliency standards are starting to come out. (Emily will send landscape standards/paper written by Meister Consultants Group on Boston.)
- Insurance rates are going to change with climate change. How do we deal with this?
- City fees (e.g., stormwater) should really go back into subsidies or benefits to low-income residents.
- How can we hold more water on the property? We are spending a lot of money treating stormwater.
- Ordinance that requires compliance with removing gutters. Look at Arlington example.
- Can we do a building resiliency ordinance? How would this interact with the building code?
- Tie incentives to building performance. (Disclosure ordinance?) Need to strike a balance because castigating poorly performing buildings might pose an equity problem.
- Can you do a performance contract for residential buildings?
- We need to get off of natural gas.
- Look at electrical program at Somerville High School as an opportunity to build local economy and cultivate a partner for future programs.
- Do we need to worry about drought and fire safety because of climate change? Is this going to be a risk?
- Big priorities for this group:
 - o Renewable heating and cooling
 - The split incentives
- We need to think about changes to buildings that still fit into neighborhood architectural fabric.
 While we recognize that change will occur, people are deeply connected to the look and feel of their neighborhoods.
- Affordable housing needs to have affordable utilities.

Additional Ideas shared after the meeting:

- 1. Greater Somerville Metro Region Architects & Engineers Emergency Response Force- This would be a volunteer group of professionals with knowledge about building design that would be able to assess structures after a disaster and make a decision as to the buildings structural integrity and decide if it is inhabitable. Members typically take a FEMA class and in the case of a disaster they work in partnership with local relief efforts and municipal officials to assess residential and commercial structures after first responders have made the assessment that it is safe for them begin the process. There is an active board in NH and RI, but unfortunately it looks like the effort to start one in MA sputtered out in 2013. This may be need to be a regional effort given that you need a number of folks with specific credentials to volunteer and a few motivated individuals to spearhead the effort. Is there something Somerville could do to encourage such an organization in our area? Here's the link to the previous MA effort: http://www.meaer.org/
- 2. Would the City or a local community organization be a co-signer on HEAT loans for residents with limited means or bad credit? The loan is a no interest loan through Mass Save, but the actual loan is from a bank and requires those getting the loan to meet the same requirements as a typical loan.

Having a co-signer could make this option available to those with limited means or those that had a break in employment recently for one reason or another.

3. Is it possible for the City provide an incentive to get the entire scope of Mass Save work done as someone mentioned in the meeting or to have a HERS assessment done and lower their homes HERS score by a certain number of points? If the City pushed an either/ or option it might encourage more people to take actions to lower their homes carbon footprint. The cost of the HERS assessments (I'm guessing maybe \$1,500) would have to be covered somehow but it would give people that can't have Mass Save work done at a reasonable cost because of something like knob & tube wiring, vermiculite, or structural reasons another option. This would also give those with homes that are well air sealed & insulated or those that would rather invest in mechanical systems or solar panels an additional incentive to take action.